



Mexico – GRAPOS

CO2 Decaf

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| Farm: | Grupo de Agricultores Positivos S.P.R. de R.L. |
| Varietals: | Típica, Marsellesa, Bourbon |
| Processing: | Fully Washed; CO2 Decaf |
| Altitude: | 700 – 1,600 metres above sea level |
| Owners: | 2,708 smallholder producers |
| Town: | El Porvenir and Llano Grande |
| Region: | Chiapas |
| Country: | Mexico |
| Average Farm Size: | 3 hectares |



Additional information:

Representing roughly 2% of global coffee production, Mexico is well-known for its coffee grown in the Chiapas and Oaxacan regions situated in the southern reaches of the country. Coffee first arrived in Mexico with the Spanish colonists in the 18th century. After independence from Spain, the country, although in turmoil, began to slowly cultivate coffee plantations in the southern states. Border disputes with Guatemala ensued as Europeans bought up large swathes of land, pushing indigenous populations into the mountains.

The Mexican Revolution led to Agrarian Reforms redistributing land to local populations. Small-scale coffee production exploded with the creation of the National Coffee Institute of Mexico (INMECAFE) in 1973 yet was dismantled in 1989 following the International Coffee Crisis. With the lack of support from a governing coffee body, producers were then forced to sell coffee at low prices to local coyotes. Thanks to the creation of cooperatives and other producer organizations, producers received more support and were provided with better access to international markets. Today, coffee production has stabilized and remained strong. This lot is one example of how Mexican coffee has prospered.

Chiapas is situated in the southern reaches of Mexico, with rich biodiversity and climbing altitudes – this region is known for its healthy soils and ideal climates for coffee production. As one of the five Mayan States in Mexico, Chiapas has a wealth of archaeological and cultural history. It is within this region that the Grupo de Agricultores Positivos S.P.R. (GRAPOS) was founded in 2007.

Throughout the Chiapas region, specifically in the El Porvenir and Llano Grande municipalities, are collections of smallholder coffee producers growing coffee in the rich upper reaches of the mountains. The GRAPOS organization was initially comprised of 90 producers, growing to 300 the following year, and expanded to the 2,708 producers involved today, 772 of which are females.

El Porvenir translates to mean 'the future,' which is evident in its high altitudes, rich biodiversity, and potential to create a harmonious future with high quality coffee production and ecosystem preservation. The area also borders the Triunfo Biosphere Reserve, which explains the biodiverse array of native flora and fauna in the area.

GRAPOS seeks to provide each of these producers with the necessary guidance to produce high quality coffee. This comes in the form of technical assistance, free seedlings to replace damaged trees, in addition to other educational programs.



There are 8 collection centres throughout the area to make it easier for producers to deliver their cherries to the mill located in Angel Díaz, Honduras, Llano Grande, Porvenir, Vega del Rosario, Tapachula, Guatimoc, and Chicomuselo. The producers live in remote farms, making communication and travel quite difficult – so GRAPOS provides the necessary assistance to the producers, making it easier to deliver and sell cherries. Thanks to the organization's involvement, these producers have seen an increase in yields and quality, thus leading to an increase in overall income. This then allows more funds to be invested in the farms and creates a future for coffee production in this region.

After the producers pick and deliver the coffee cherries, they are sorted for quality and pulped to remove the exterior skin. Once clean, the coffee is then fermented for 24 hours to breakdown the external mucilage. After fermentation is complete, the beans are washed and spread evenly on cement patios to dry in the open sun until the ideal moisture content is reached.

Description of the CR3 Natural Liquid Carbon Dioxide Coffee Decaffeination Process

One of the vital elements and most important compounds of our natural environment is carbon dioxide. It is in the air we breathe, it is the gas that makes mineral water effervescent and, by assimilation, enables plants to grow. It is also a highly selective solvent for caffeine. Based on this phenomenon, CR3 developed its Natural Liquid Carbon Dioxide Coffee Decaffeination Process. In this patented process, the natural carbon dioxide is used under sub-critical conditions, i.e. in a liquid state at low temperature and pressure (relative to the supercritical process). These particularly gentle process parameters, together with the good caffeine selectivity of CO₂, guarantee a high retention rate of the coffee components responsible for aroma and taste. The process can be described in detail as follows:

The raw, unroasted coffee is moistened with water and put into a vessel where it is brought into contact with pressurised, liquid carbon dioxide. By circulation through the coffee, the carbon dioxide draws the caffeine out of the bean. In an evaporator, the caffeine precipitates out from the CO₂ which, after evaporation and re-condensation, is pumped again into the vessel containing the coffee for a new cycle. When the required residual caffeine level is reached, the CO₂ circulation is stopped, and the coffee is discharged into a drier where it is gently dried until it reaches the original moisture content. The coffee is then ready for roasting.

The specific characteristics of the CR3 Natural Liquid Carbon Dioxide Coffee Decaffeination Process are:

- The compounds responsible for the flavour and the taste in the roasted and brewed coffee, as well as the cell structure of the green and roasted bean, are left essentially intact. This is of clear benefit in fine, high-grade coffees.
- No health risk involved since the coffee is placed in contact with only 100% safe substances – the chemically-inert (and completely evaporating) carbon dioxide, and pure water.
- The extraction solvent is all-natural – an important aspect that represents a strong selling point (“Naturally Decaffeinated”).
- Certification as Organic and Kosher by the appropriate organisations/authorities.
- A broad appeal that allows the roaster to offer a high-quality 99.9% caffeine-free decaffeinated coffee that will satisfy even the most discriminating taste.